UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

23117 7590 0423/2008 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203

EXAMINER					
LEE, GILBERT Y					
ART UNIT	PAPER NUMBER				
3673	•				

DATE MAILED: 04/23/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/530,717	04/08/2005	Shuichi Kubota	1207-115	7748	
TITLE OF INVENTION: SPHERICAL ANNULAR SEAL MEMBER					

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	07/23/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION NOT THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THE APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further c indicated unless correcte maintenance fee notificat	form should be used to correspondence including d below or directed officers.	or tran	smitting the ISSU Patent, advance or in Block 1, by (a					
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				N Fe ps ha	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, mus have its own certificate of mailing or transmission.			
23117	7590 04/23	/2008			Cer	tificat	of Mailing or Trans	nission
NIXON & VAN 901 NORTH GL ARLINGTON, V	EBE ROAD, 11TH	FLO	OR	I I St ad tra	tereby certify that that tes Postal Service values dressed to the Mai insmitted to the USP	is Fee(vith su I Stop TO (57	s) Transmittal is being ficient postage for firs ISSUE FEE address I) 273-2885, on the da	deposited with the United class mail in an envelope above, or being facsimile te indicated below.
								(Depositor's name)
								(Signature)
								(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTO	R	ATTC	RNEY DOCKET NO.	CONFIRMATION NO.
10/530,717	04/08/2005			Shuichi Kubota			1207-115	7748
TITLE OF INVENTION:	SPHERICAL ANNUL	AR SE.	AL MEMBER					
APPLN, TYPE	SMALL ENTITY	IS:	SUE FEE DUE	PUBLICATION FEE DUI	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO		\$1440	\$300	\$0		\$1740	07/23/2008
EXAMI	INER		ART UNIT	CLASS-SUBCLASS	7			
LEE, GILI	BERT Y		3673	277-650000	_			
Change of corresponde CFR 1.363).	nce address or indicatio	n of "Fe	ee Address" (37	2. For printing on the	patent front page, li	st		
				(I) the names of up or agents OR, alterna	to 3 registered pater tively.	nt attor	neys I	
Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.			(2) the name of a single firm (having as a member a 2					
PTO/SB/47; Rev 03-02 Number is required.	cation (or "Fee Address 2 or more recent) attack	ed. Use	ation form e of a Customer	registered attorney o 2 registered patent at listed, no name will b	orneys or agents. If e printed.	no nan	ne is 3	
3. ASSIGNEE NAME AN								
PLEASE NOTE: Unle recordation as set forth	ess an assignee is ident in 37 CFR 3.11. Com	ified be detion	low, no assignee of this form is NO	data will appear on the T a substitute for filing a	patent. If an assign n assignment.	ice is i	lentified below, the do	cument has been filed for
(A) NAME OF ASSIG				(B) RESIDENCE: (CIT				
Please check the appropri	ate assignee category or	catego	ries (will not be pr	inted on the patent):	Individual 🗆 C	orporat	ion or other private gro	up entity Government
4a. The following fee(s) a	re submitted:		48	. Payment of Fee(s): (PI	ease first reapply a	ny pre	lously paid issue fee s	hown above)
Issue Fee	o small entity discount p			A check is enclosed Payment by credit of			and a d	
Advance Order - #		ermue	(a)	The Director is here	oy authorized to cha	rge the	required fee(s), any def	iciency, or credit any
				overpayment, to De	oosit Account Numb	er	(enclose ar	extra copy of this form).
5. Change in Entity Stat	us (from status indicate : SMALL ENTITY state			☐ b. Applicant is no k	nger claiming SMA	LL.EN	FITY status See 37 CE	R 1 27(a)(2)
								e assignee or other party in
Authorized Signature					Date			
Typed or printed name					Registration N			
This collection of informa an application. Confidenti submitting the completed this form and/or suggestic Box 1450, Alexandria, Vi Alexandria, Virginia 2231	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this bu irginia 22313-1450. DO (3-1450.	FR 1.3 U.S.C. USPT rden, sh O NOT	11. The informatic 122 and 37 CFR O. Time will vary nould be sent to th SEND FEES OR	on is required to obtain on 1.14. This collection is a depending upon the ince Chief Information OfficoMPLETED FORMS	retain a benefit by stimated to take 12 ividual case. Any co cer, U.S. Patent and IO THIS ADDRES:	the pub minute ommen Trader S. SEN	lic which is to file (and s to complete, including is on the amount of tin nark Office, U.S. Depa D TO: Commissioner f	by the USPTO to process g gathering, preparing, and the you require to complete rtment of Commerce, P.O. or Patents, P.O. Box 1450

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

e: COMMISSIONER FOR PATENTS P O Box 1450 Alexandria, Virgima 22313-1450 www.uspko.gov

DATE MAILED: 04/23/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/530,717	04/08/2005	Shuichi Kubota	1207-115 7748			
23117 7	590 04/23/2008		EXAMINER			
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR			LEE, GILBERT Y			
			ART UNIT PAPER NUMBER			
ARLINGTON, V.	A 22203	3673				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)	
10/530,717	KUBOTA ET AL.	
Examiner	Art Unit	
CH DEDT V LEE	3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to the supplemental amendment of 4/8/08.
- 2. The allowed claim(s) is/are 17-29.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 - 1. A Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDOMMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) 🔲 including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date _____
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2.
 Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
 - Paper No./Mail Date 11/6/07
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other .

Application/Control Number: 10/530,717

Art Unit: 3673

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: The closest prior art, Maeda et al. (US Patent No. 5,499,825) discloses the invention substantially as claimed in the independent claims, but fails to disclose the required heat-resistant materials and there is no motivation, absent the applicant's own disclosure, to modify the Maeda et al. reference in the manner required by the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to GILBERT Y. LEE whose telephone number is (571)272-5894. The examiner can normally be reached on 8:00 - 4:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia L. Engle can be reached on (571)272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/530,717 Page 3

Art Unit: 3673

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patricia L Engle/ Supervisory Patent Examiner, Art Unit 3673

/G. Y. L./ Examiner, Art Unit 3673